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EXAMINER
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ART UNIT	PAPER NUMBER
2157	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/884,289	BRANNOCK, KIRK D.	
	Examiner	Art Unit	
	Ramy M. Osman	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11,13-15 and 17-30* is/are rejected.

7)☒ Claim(s) *12 and 16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

1. This communication is responsive to the amendment filed on August 24, 2005. Claims 7,13,17,22 and 26 were amended. No claims were added or cancelled. Claims 1-30 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4,8-11,13-15,17,18 and 22-30 rejected under 35 U.S.C. 102(b) as being anticipated by Dayan et al (US Patent No 5,230,052).

5. In reference to claims 1,13,17,22 and 26, Dayan teaches a method, a computer system and a non-volatile memory component comprising:

loading platform firmware during a single pre-boot phase of a computer system by, executing a first portion of platform firmware code that is stored locally in the computer system during the single pre-boot phase (column 6 lines 5-15);

retrieving a second portion of platform firmware code from a remote firmware storage device(column 4 lines 1-30, column 6 line 60 – column 7 line 15); and

executing the second portion of platform firmware code during the single pre-boot phase (column 8 lines 10-45 and claim 1).

6. In reference to claim 2,23 and 28, Dayan teaches the method, system and non-volatile memory of claims 1,22 and 26 respectively, wherein execution of the first portion of platform firmware code performs the functions of:

initializing a processor chipset and system memory (column 5 lines 23-67 and figure 2);

initializing a network interface (figure 1 ref#39); and

establishing a network communication link with a network server via which the remote firmware storage device may be accessed (column 6 lines 5-25 and column 6 line 45 – column 7 line 15).

7. In reference to claim 3, Dayan teaches the method of claim 2, wherein execution of the first portion of platform firmware code further performs the function of requesting the network firmware server to send a particular set of platform firmware code corresponding to the second portion of platform firmware code that is stored in a firmware file on the remote firmware storage device over the network communication link to the computer system (column 7 lines 50-67).

8. In reference to claim 4, Dayan teaches the method of claim 3, further comprising determining a location of the firmware file on the remote firmware storage device (column 6 lines 1-30).

9. In reference to claim 8, Dayan teaches the method of claim 2, wherein the network firmware server is accessed via an Internet-based network communication link, further comprising: storing network location information address corresponding to the network firmware server on a local storage device; and using the network location information to access the network firmware server (column 5 line 50 – column 6 line 40, this is an inherent procedure within the system of Dayan).

10. In reference to claims 9,14,24 and 29, Dayan teaches the method of claims 1,13,22 and 26, wherein execution of the first portion of firmware code loads a driver that enables a pre-boot phase service on the computer system to access the second portion of platform firmware code from the remote firmware storage device (column 7 line 45 – column 8 line 35).

11. In reference to claims 10,25 and 30, Dayan teaches the method, system and non-volatile memory of claims 9,22 and 26 respectively, wherein the second portion of platform firmware code is stored in a firmware volume (FV), and execution of the driver publishes an FV interface protocol instance that informs the pre-boot phase service that it can access the second portion of platform firmware code via the driver (column 7 line 45 – column 8 line 35).

12. In reference to claims 11 and 15, Dayan teaches the method of claims 10 and 14, wherein the interface protocol instance comprises a software abstraction that enables consumers of firmware to access the firmware volume without requiring those consumers to know where or how the firmware code is stored in the firmware volume (column 5 lines 1-20 and column 7 line 45 – column 8 line 35).

13. In reference to claims 18 and 27, Dayan teaches the method and non-volatile memory of claims 17 and 26 respectively, wherein the first portion of platform code is stored in a rewritable

memory device operatively coupled to a primary processor for the computer system and updating the platform firmware code comprises rewriting the rewritable memory device; flash ROM component (column 7 line 45 – column 8 line 35).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 5-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Dayan (US Patent No ~~5,835,761~~ 5,230,052) in view of Cromer et al (US Patent No 6,718,464).

16. In reference to claim 5, Dayan teaches the method of claim 4. Dayan fails to explicitly teach wherein the location of the firmware file is determined by: passing platform identification information to the network server, and determining the location of the firmware file based on the platform identification information passed to the network server. However, Cromer teaches a client computer downloading BIOS modules from a server. Cromer discloses passing platform identification information to the network server, and determining the location of the firmware file based on the platform identification information passed to the network server for the purpose of obtaining customized BIOS modules for the client (column 2 lines 10-35, column 3 lines 35-55 and column 5 line 55 – column 6 line 10).

It would have been obvious for one of ordinary skill in the art to modify Dayan by passing platform identification information to the network server, and determining the location

of the firmware file based on the platform identification information passed to the network server as per the teachings of Cromer for the purpose of obtaining customized BIOS modules for the client.

17. In reference to claim 6, Dayan teaches the method of claim 5, wherein the platform identification information comprises one of a processor identification code corresponding to a processor for the computer system or a model number for the computer system (Cromer, column 2 lines 10-35, column 3 lines 35-55 and column 5 line 55 – column 6 line 10).

18. In reference to claim 7, Dayan teaches the method of claim 3, further comprising:

creating configuration information that maps a pointer to an appropriate set of platform firmware code for the computer system with a network identifier for the computer system (column 7 lines 30-55);

sending a message to the network server requesting the network server to send back the appropriate set of platform firmware code (column 7 lines 30-55);

extracting the network identifier from the message sent to the network server; and

locating the appropriate set of platform firmware code via the pointer (Cromer, column 2 lines 10-35, column 3 lines 35-55 and column 5 line 55 – column 6 line 10).

19. Claims 19-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Dayan (US Patent No ~~5,835,761~~ 5,230,052) in view of Gafken (US Patent No 6,026,016).

20. In reference to claim 19, Dayan teaches the method of claim 17. Dayan fails to explicitly teach further comprising determining whether or not an existing set of platform firmware code needs to be updated and updating the existing set of platform firmware code if it is determined the existing set of platform firmware code needs to be updated. However, Gafken teaches the

capability of updating critical code such as BIOS (column 3 lines 30-40). Gafken discloses determining whether or not an existing set of platform firmware code needs to be updated and updating the existing set of platform firmware code if it is determined the existing set of platform firmware code needs to be updated (column 13 lines 5-35 and column 14 lines 15-40).

It would have been obvious for one of ordinary skill in the art to modify Dayan by determining whether or not an existing set of platform firmware code needs to be updated and updating the existing set of platform firmware code if it is determined the existing set of platform firmware code needs to be updated as per the teachings of Gafken for the purpose of updating critical code if it is deemed to be out-dated.

21. In reference to claim 20, Dayan teaches the method of claim 17, wherein the computer system is programmed to schedule its platform firmware code on a scheduled basis, wherein the computer system boots-up using the method of claim 17 when it is programmed to update its platform firmware code, otherwise the computer system boots-up in a conventional manner (Gafken, column 13 lines 5-35 and column 14 lines 15-40).

22. In reference to claim 21, Dayan teaches the method of claim 20, including storage in CMOS (columns 5&6). Dayan fails to teach wherein a scheduler for updating the set of platform firmware code is stored in CMOS memory. However, Gafken teaches a scheduler (column 13 lines 5-35 and column 14 lines 15-40).

It would have been obvious for one of ordinary skill in the art to modify Dayan by making the Scheduler of Gafken be contained in the CMOS of Dayan, since the updating is being done during the pre-boot phase and only the CMOS would be accessible at that stage.

Allowable Subject Matter

23. Claims 12 and 16 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten into the independent claims including all of the limitations of the base claim and any intervening claims.

24. The following is a statement of reasons for the indication of allowable subject matter:

The below indicated limitations if written into their independent claims would render the claims patentable over the cited art due to the novelty of the subject matter:

- where an interface protocol instance corresponding to a first firmware volume, further comprising:

loading and executing the first portion of the second portion of firmware code, thereby causing a second driver to be loaded that publishes a second FV interface protocol instance that enables access to a second firmware volume; and

retrieving a second portion of the second portion of firmware code from the second firmware volume via the second FV interface protocol instance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramy M. Osman whose telephone number is (571) 272-4008. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMO
September 30, 2005

10/01/05